

Preventing tactical training injuries: progress & the future

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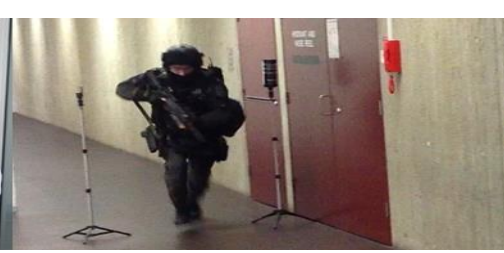
Preventing Tactical Training Injuries: progress and the future

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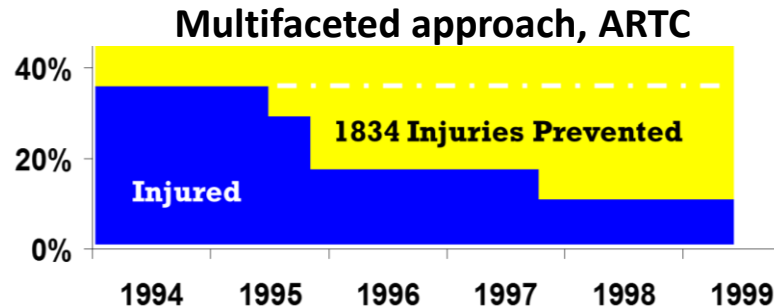
² Tactical Research Unit, Bond University



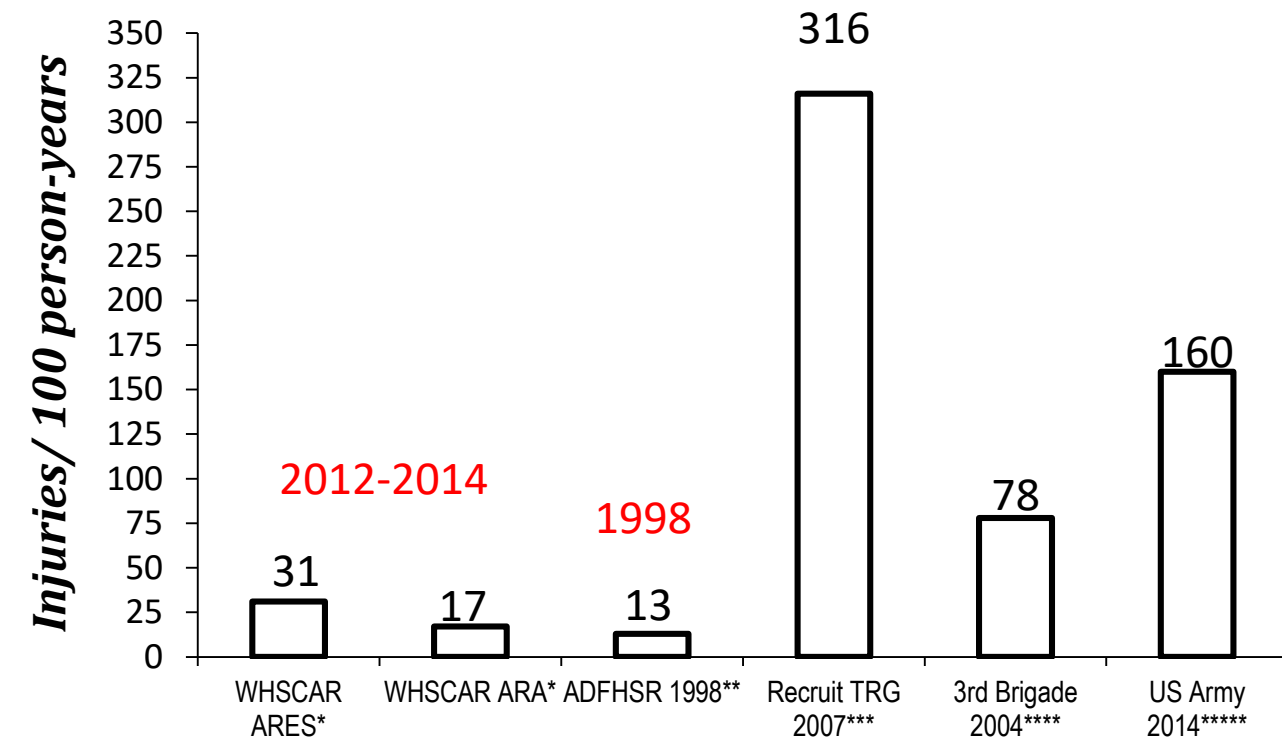


Preventing tactical training injuries: *Progress?*

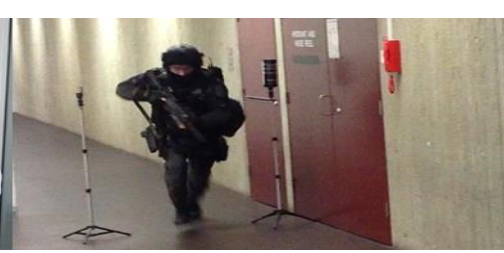
- *Lots of activity* - focus on fitness, conditioning, selection, standardization/ control of training, hazard management, PHA / RMA / hybrid systems
- *Some successes* – but limited in time and reach (see reference list for details)



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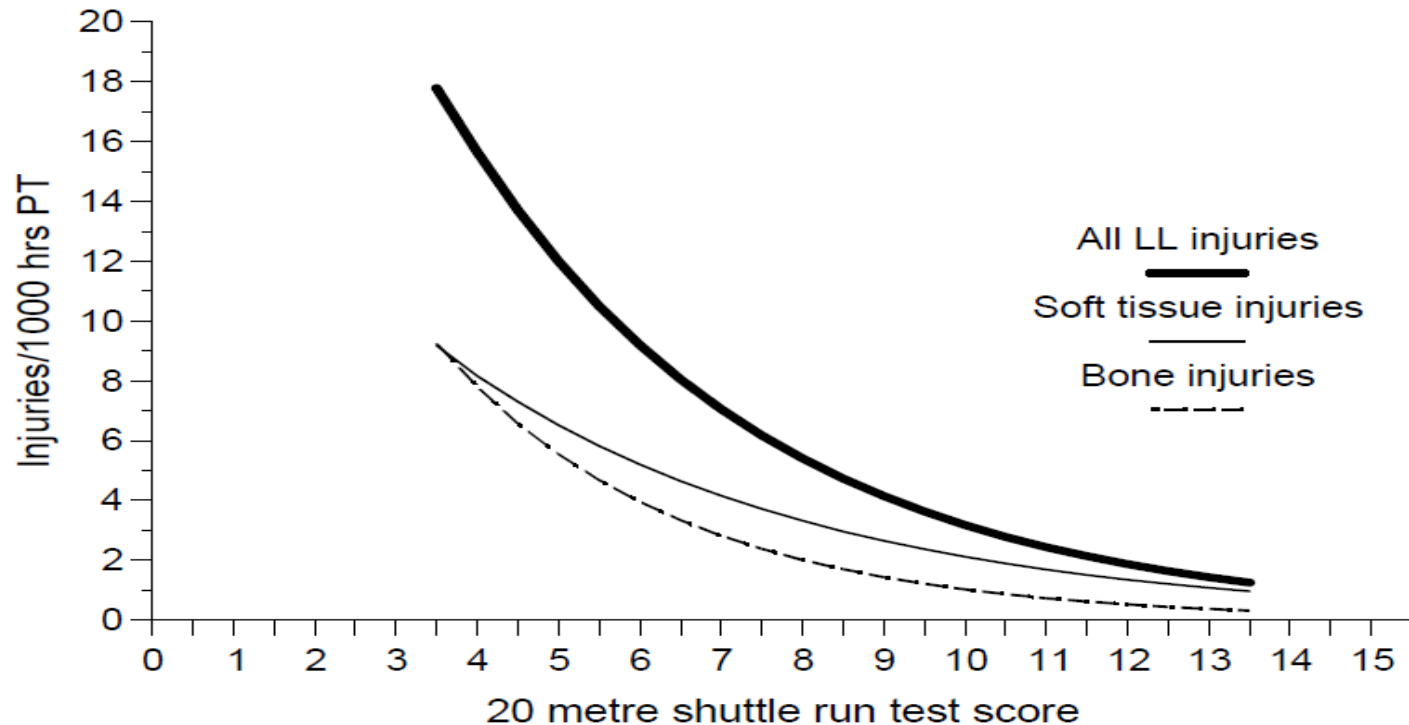
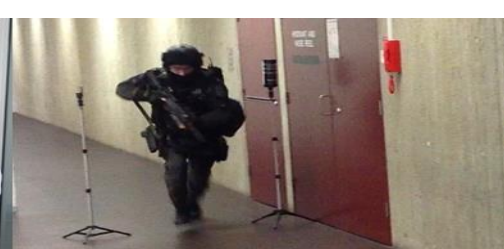


(Pope & Orr, 2017)

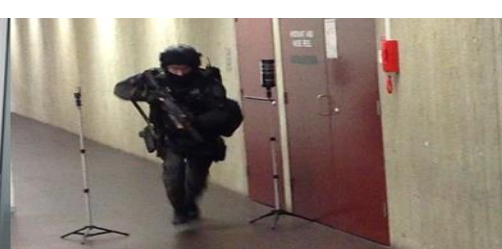


Preventing tactical training injuries: *Progress?*

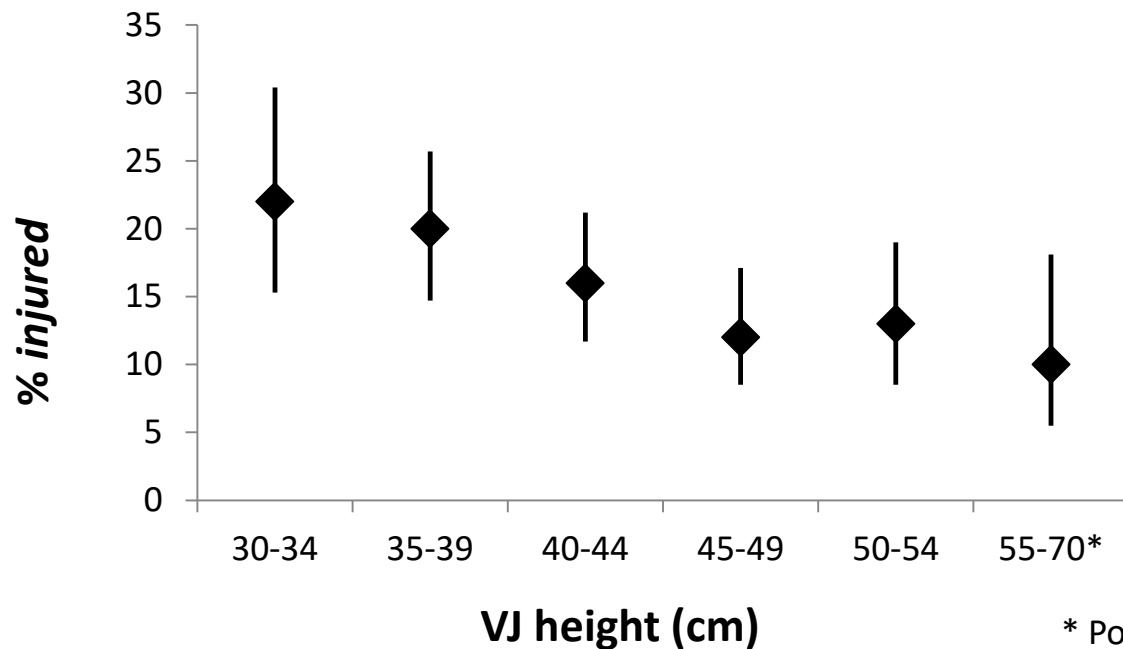
- *Key issues*
 - Injury causation is multifactorial
 - Each factor typically accounts for 1-5% of overall injury risk (but small risks accumulate over repeated exposures & factors additive)
 - Command changes & posting cycle - progress often lost or reversed
 - Injuries a hidden problem – reporting/ monitoring inadequate & ‘gamed’ due to repercussions
 - Focus on the wrong issues (eg gender rather than fitness, stature)
 - Translation to practice can be fraught (eg balance & agility) & some interventions don’t work (eg pre-exercise stretching)



(Pope, 2002, pp. 82;
[www.researchgate.net/
publication/273119693](http://www.researchgate.net/publication/273119693)
[Prediction and prevent
ion of lower limb inju
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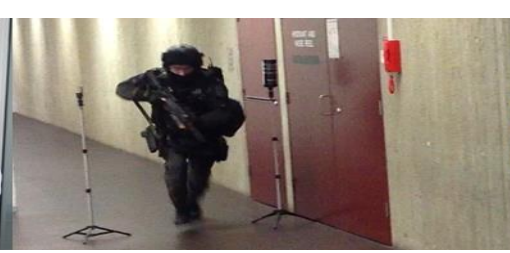


Percentage of Recruits *injured*, by VJ height, with 95% CI



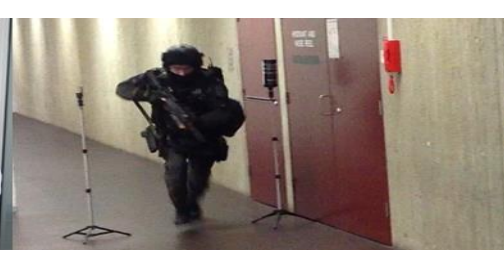
(Orr R, Pope R, Peterson S,
Hinton B & Stierli M, 2016)

* Pooled results (small cell counts)



Preventing tactical training injuries: *the Future?*

- *We need:*
 - High-level buy-in, monitoring, oversight, accountability – recognize and monitor personnel / mission consequences
 - Outcome measures that are difficult to ‘game’, eg personnel impacts, actions to address factors
 - A system approach – PHA/RMA hybrid, automated system control charts & alerts
 - Multifaceted interventions
 - Intervention studies



References

Schneider, G.A., Bigelow, C. & Amoroso, P.J. (2000). Evaluating risk of re-injury among 1214 army airborne soldiers using a stratified survival model. *American Journal of Preventive Medicine*, **18** (3 Suppl), pp. 156-163

Pope, R (2002). Prediction & prevention of injuries and attrition in army recruits [PhD Thesis]. Charles Sturt University

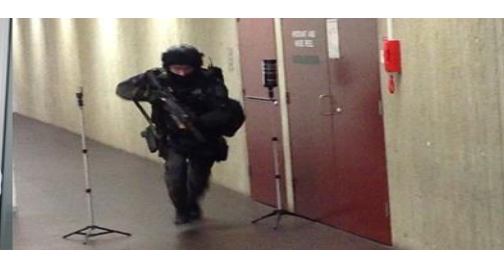
Pope, R., Firman, J. & Prigg, S. (1999). Cost savings associated with injury prevention in army recruits. (Extended Abstract). In *Proceedings of the Fifth IOC World Congress on Sport Sciences*. Sports Medicine Australia: Canberra, pp. 228.

Pope RP (2002). Case Report: injury surveillance and systematic investigation identify a rubber matting hazard for ACL rupture on an obstacle course. *Military Medicine*, 167, 4, 359-362

Pope RP (2002). Rubber matting on an obstacle course causes ACL ruptures and it's removal eliminates them. *Military Medicine*, 167, 4, 355-358

Pope RP, Herbert RD, Kirwan JD & Graham BJ (2000). A randomized trial of pre-exercise stretching for injury prevention. *Medicine and Science in Sport and Exercise*, 32, 2, 271-277

Pope RP (1999). Prevention of pelvic stress fractures in female army recruits. *Military Medicine*, 164, 5, 370-373



References

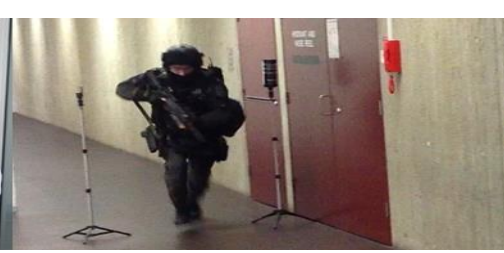
Rudzki SJ & Pope R (2006). Injury reductions seen in an infantry brigade using the Australian Defence Injury Prevention Program (DIPP). *American College of Sports Medicine Annual Meeting 2006, Denver, Colorado, USA*. Abstract published in *Medicine & Science in Sports & Exercise*, 38 (5) Supplement May 2006, p. S348

Pope, R & Orr, R (2017). Incidence rates for work health and safety incidents and injuries in Australian Army Reserve vs full time soldiers, and a comparison of reporting systems. *Journal of Military & Veterans Health*, 25 (2): 16-25

Goodall R, Pope R, Coyle J & Neumayer, R (2012). Balance and agility training does not always decrease lower limb injury risks: a cluster-randomised controlled trial. *International Journal of Injury Control and Safety Promotion*, 20 (3), 271-281

McKinnon A, Ozanne-Smith J, Pope R (2009). Optimizing the utility of military injury surveillance systems: a qualitative study within the Australian Defence Force. *Military Medicine*, 174, 5, 470-478

Orr R, Pope R, Peterson S, Hinton B & Stierli M (2016). Leg power as an indicator of risk of injury or illness in police recruits. *International Journal of Environmental Research & Public Health (Special issue: Occupational Safety and Related Impacts on Health and the Environment)*, 13, 237; 1-10. doi: 10.3390/ijerph13020237



Questions?

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